

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0082] with the following amended paragraph:

[0082] One embodiment of a transceiver module 200 having pass-through functionality, shown in FIG. 14, includes a receiver eye opener 205b, an eye opener 205a, and pass-through control 510 in the eye opener control module 350. Data received from the receiver is stored within a fourth buffer 945d in the receiver eye opener 205b without resetting a jitter budget within the data path. The fourth buffer 945d is coupled to a bypass line 532 and a first CDR 534. The pass-through control 510 toggles the output on the fourth buffer 945d between the pass-through line 532 and the second CDR 925b ~~first CDR 925a~~ depending on whether the second CDR 925b can lock onto the data. The bypass control 510 may be designed to automatically toggle between the outputs on the fourth buffer 945d or be manually controlled by an operator via a control interface (e.g., serial interface 385). For example, a fourth CDR 925d may also be coupled to the fourth buffer 945d to operate on a different data stream than data operated on by the second CDR 925b. Also, this fourth CDR 925d would allow toggling by the pass-through control 510 between three different data paths. It will be understood that multiple eye openers may operate within the receiver eye opener 205b to facilitate different data streams being provided eye opener functionality on the eye opener 205b. Additionally, rate detection may be integrated along a receive path or transmit path to enable intelligent detection of data rates received from both a host and a network. According to one example, an adjustable wideband oscillator and logic circuitry may be used to identify a rate on a particular signal. In another example, multiple narrowband oscillators, a discriminator, and logic circuitry may also be used to identify the rate of a signal. This rate detection facilitates the use of multiple eye openers along a data path resulting in eye opener functionality on a single data path being available to signals having different data rates.